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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,980	07/07/2003	Christian Helmut Thoma	3006-1008-1	6384

466 7590 08/12/2004

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EXAMINER

WILSON, GREGORY A

ART UNIT	PAPER NUMBER
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3749

DATE MAILED: 08/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/612,980

Applicant(s)

THOMA, CHRISTIAN HELMUT

Examiner

Gregory A. Wilson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,11-17,24 and 31-35 is/are rejected.
- 7) ☒ Claim(s) 3-10,18-23 and 25-30 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Specification*

The disclosure is objected to because of the following informalities:

On page 5, line 16, change "may" to --many--,

On page 13, line 19, change "3i" to --33i--.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1, 2, 11-14, 17, 24, and 31-34** are rejected under 35 U.S.C. 102(b) as being anticipated by **Griggs (5,957,122)**. **Griggs** discloses a fluid heating device (10) having an internal chamber, a fluid inlet (63) overlying the axis of rotation, a fluid outlet (66) both disposed in the housing and in fluid communication with the internal chamber, a rotor (12) mounted for rotation within the internal chamber about the axis of rotation, an intermediate portion (30A & 30B) comprised as a cylindrical housing (ie: sleeve structure) wherein end portions (46A & 46B) comprise rear and front housing covers and provided with circular registers (40A & 40 B) engaging the housing and clamped by a plurality of bolts (58); a drive shaft (14) whose center defines an axis of rotation and

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is rotatably supported by a pair of bearings (48A & 48B) and extends into the internal chamber for imparting mechanical energy to the rotor, the bearing are disposed in the respective end portions. **Griggs** furthermore discloses a fluid seal (SEE column 4, lines 52-57) disposed in the housing and, the rotor has an outer surface confronting an inner surface of the intermediate portion defining an annular fluid volume, the fluid inlet communicates with the annular fluid volume, the fluid inlet is situated near one end of the rotor and the fluid outlet is situated at an opposite end and likewise communicates with the annular fluid volume, the outer surface has a plurality of openings (24) which imparts heat generation (SEE column 9, lines 5-44) to fluid entering the chamber, the plurality of openings are circumferentially spaced at uniform intervals (SEE Figures 1 & 2); the openings are blind radial holes.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 15 & 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Griggs (5,957,122)**. **Griggs** discloses the applicants' primary inventive concept as stated above, but does not particularly recite that the openings on the surface of the rotor have at least a row of openings circumferentially spaced at variable intervals or are circumferentially displaced from another row of openings on the rotor. It would have

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been an obvious matter of design choice to modify the teachings (substitute) of **Griggs** to provide a rotor having openings of various designs, since the applicant has not disclosed that any particular arrangement of holes on the surface of the rotor solves any stated problem in a new or unexpected way or is for any particular purpose which is unobvious to one of ordinary skill. It appears that the claimed feature does not distinguish the invention over similar features in the prior art since, the rotor of **Griggs** will perform the invention as claimed by the applicant with any configuration of openings in the rotor.

***Allowable Subject Matter***

**Claims 3-10, 18-23, and 25-30** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

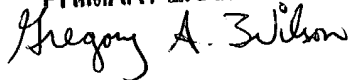
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory A. Wilson whose telephone number is (703) 308-1239. The examiner can normally be reached on 7 am - 4:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached on (703)308-1935. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GREGORY WILSON  
PRIMARY EXAMINER



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August 9, 2004